

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A hydrogen producing device for supplying at least one type of material to a reaction part together with air, oxygen, or an oxidizing agent to produce hydrogen by a specific chemical reaction, wherein:

for the at least one type of material, supply amount of each material is set by selecting one from two or more set values of flow rate which are previously determined corresponding to required hydrogen production volumes; and

for the air, oxygen, or oxidizing agent, supply amount of the air, oxygen, or oxidizing agent is varied and controlled so that a temperature of the reaction part is within a preset temperature range.

2-4. (Cancelled)

5. (Previously presented) A hydrogen producing device for supplying at least one type of material to a reaction part together with air, oxygen, or an oxidizing agent to produce hydrogen by a specific chemical reaction, wherein:

for the at least one type of material, supply amount of each material is set by selecting one from n1 pre-set values of flow rate which are previously determined corresponding to required hydrogen production volumes; and

for the air, oxygen, or oxidizing agent, supply amount of the air, oxygen, or oxidizing agent is set by selecting one from predetermined n2 pre-set values of flow rate, n1 being smaller than n2.

6-15. (Cancelled)

16. (Previously presented) A fuel cell electric power generation system comprising a hydrogen producing device, for generating electric power using hydrogen produced by the hydrogen producing device as a raw material, wherein

the hydrogen producing device is implemented by the hydrogen producing device claimed in any one of claims 1 and 5.

17. (Original) A fuel cell electric power generation system as claimed in claim 16, wherein hydrogen storage means is provided after an outlet of the hydrogen producing device.

18. (Previously presented) A distributed power source for home use or for buildings, comprising a hydrogen producing device and a fuel cell for generating electric power by use of hydrogen produced by the hydrogen producing device, wherein

the hydrogen producing device is implemented by the hydrogen producing device claimed in any one of claims 1 and 5; and

the fuel cell is implemented by a polymer electrolyte fuel cell.

19. (Original) A distributed power source as claimed in claim 18, further comprising means for recovering exhaust heat, which is generated in the fuel cell, by use of coolant, and using the recovered exhaust heat as hot water.

20. (Previously presented) A hydrogen producing device as claimed in any one of claims 1 and 5, wherein the at least one type of material includes two types of materials which are water and methane.

21. (Previously presented) A hydrogen producing device as claimed in any one of claims 1 and 5, wherein the at least one type of material includes two types of materials which are water and methanol.

22. (Previously presented) A hydrogen producing device as claimed in any one of claims 1 and 5, wherein the at least one type of material includes one type of material which is an aqueous solution of methanol.

23. (Previously presented) A hydrogen producing device as claimed in any one of claims 1 and 5, wherein the hydrogen producing device produces the hydrogen by a combined reforming method in which a combination of an exothermic reaction and an endothermic reaction is employed.

24. (Previously presented) A hydrogen producing device as claimed in any one of claims 1 and 5, wherein at least one of the flow setting means provided to the supply systems for the air, oxygen, or oxidizing agent and the at least one type of material includes on-off valves connected in parallel.